

REMARKS

Applicant has carefully reviewed and considered the Office Action mailed on April 1, 2003. Claims 14 and 27 are amended. Claims 1-34 remain pending in this application.

Information Disclosure Statement

Applicant is submitting an Information Disclosure Statement and a 1449 Form along with this Response. Applicant respectfully requests that initialed copies of the 1449 Forms be returned with the next official action from the Patent Office to indicate that the cited references have been considered by the Examiner.

Claim Objections

The Examiner objected to claims 14-18, 27-34. The objection stated:

The use of the phrases "adapted to" and "capable of" have no clear technical meaning. The use of the phrase "adapted to" does not particularly point out the invention, since Applicant has not claimed how the conventional elements are modified in accordance with the invention. The phrase "capable of" does not clearly define whether the device can perform the claimed limitations.

Applicant respectfully traverses the objections to the claims, and respectfully points out that functional language is specifically authorized by *In re Swinehart*, 439 F.2d 210, 169 USPQ 226 (CCPA 1971); MPEP §2173.05(g).

Claim 14 has been amended to clarify that a computer executes the instructions to perform a process as recited in the claim. Claim 27 has been amended to clarify that the processor and the memory cooperate to determine a desired SBAS correction source based on the SBAS correction signals using at least one predetermined criterion. The amendments to claims 14 and 27 have not been made to overcome a reference cited by the Examiner.

Applicant respectfully requests withdrawal of the objection, and reconsideration and allowance of the claims.

§102 Rejections of the Claims

Claims 1-3, 5-10, 12, 14-17 were rejected under 35 USC § 102(e) as being anticipated by Moeglein et al.(U.S. 6,411,254). Applicant respectfully traverses the rejection. Applicant does not admit that the Moeglein et al. reference (Moeglein) is prior art, and expressly reserves the right to swear behind it at a later date. However, Applicant respectfully asserts that the claims are distinguishable from Moeglein for at least the following reasons.

Moeglein relates to a system where satellite position system (SPS) reference receivers have known positions and communicate data to a communication network, and a plurality of digital processing systems are coupled to the communication network to receive satellite ephemeris data (Abstract). The processing systems compute pseudorange corrections, and transmit these corrections through the communication network.

Applicant is unable to find, among other things, in the cited portions of Moeglein a reference to a Space Based Augmentation System (SBAS), such as a Wide Area Augmentation System (WAAS). SBAS is described throughout the present application. For example, an overview of SBAS is provided at page 3 line 20 to page 5 line 24. In SBAS, stationary wide area ground reference stations (WRSSs) receive GPS signals, determine error in the signals, and relay data to a wide area master station (WMS). The WMS calculates correction messages for the GPS satellites, and uplinks the correction messages for the GPS satellites to SBAS satellites. These SBAS satellites broadcast the correction messages to the GPS receivers. The GPS receivers use these correction messages to correct for GPS satellite errors.

With respect to independent claim 1, Applicant is unable to find, among other things, in the cited portions of Moeglein, either a showing or a suggestion of a method where Space Based Augmentation System (SBAS) correction messages are received from a selected SBAS satellite, it is determined whether at least one criterion is satisfied for using the selected SBAS satellite as a correction source, and a second SBAS satellite is selected as a correction source from which to receive SBAS correction messages when the at least one criterion is not satisfied for using the selected SBAS satellite as a correction source, as recited in claim 1. Claims 2-3 and 5-10 depend either directly or indirectly on independent claim 1, and thus are believed to be patentable for at least the reasons provided with respect to claim 1.

With respect to independent claim 12, Applicant is unable to find, among other things, in the cited portions of Moeglein, either a showing or a suggestion of a method where signals from at least two WAAS satellites are synchronized, one WAAS satellite is selected from which to receive WAAS correction messages, WAAS correction messages are received from the selected WAAS satellite, it is determined whether at least one criterion is satisfied for using the selected WAAS satellite as a correction source, and a second WAAS satellite is selected to be used as a correction source from which to receive WAAS correction messages when the at least one criterion is not satisfied for using the selected WAAS satellite as a correction source, as recited in claim 12.

With respect to independent claim 14, Applicant is unable to find, among other things, in the cited portions of Moeglein, either a showing or a suggestion of a computer-readable medium having instruction where a computer executes the instructions to synchronize to signals from at least two Space Based Augmentation System (SBAS) satellites, select one SBAS satellite from which to receive correction messages, receive correction messages from the selected SBAS satellite, determine whether at least one criterion is satisfied for using the selected SBAS satellite as a correction source, and select a second SBAS satellite to be used as a correction source from which to receive correction messages if the at least one criterion is not satisfied for receiving correction messages from the selected SBAS satellite, as recited in the claim. Claims 15-17 depend directly on independent claim 14, and thus are believed to be patentable for at least the reasons provided with respect to claim 14.

Claims 19-34 were rejected under 35 USC § 102(e) as being anticipated by Gaal (U.S. 20020072378). Applicant respectfully traverses the rejection. Applicant notes that claims 20-26 have been allowed in paragraph 7 of the Office Action. Thus, Applicant believes that this rejection is intended to include claims 19 and 27-34. Applicant does not admit that the Gaal reference (Gaal) is prior art, and expressly reserves the right to swear behind it at a later date. However, Applicant respectfully asserts that the claims are distinguishable from Gaal for at least the following reasons.

Gaal appears to relate to broadcasting position location data in a wireless communications system. Applicant is unable to find, among other things, in the cited portions of

Gaal a reference to a Space Based Augmentation System (SBAS), such as a Wide Area Augmentation System (WAAS).

With respect to independent claim 19, Applicant is unable to find, among other things, in the cited portions of Gaal, either a showing or suggestion of a data structure for use by a Global Positioning System (GPS) receiver device in making Space Based Augmentation System (SBAS) corrections, where the data structure includes a field representing a variable array of health information for SBAS satellites, a field representing a Current SBAS Correction Source (CSCS) variable index, and a field representing a Potential SBAS Correction Source (PSCS) variable index, as recited in claim 19.

With respect to independent claim 27, Applicant is unable to find, among other things, in the cited portions of Gaal, either a showing or suggestion of a Global Positioning System (GPS) receiver device, comprising a processor, a memory, and a GPS receiver to receive GPS signals and Space Based Augmentation System (SBAS) correction signals and to communicate with the processor, where the processor and the memory cooperate to determine a desired SBAS correction source based on the SBAS correction signals using at least one predetermined criterion, as recited in the claim. Claims 28-34 depend either directly or indirectly on independent claim 27, and thus are believed to be patentable for at least the reasons provided with respect to claim 27.

Allowable Subject Matter

Claims 4, 11, 13 and 18 were objected to as being dependent upon a rejected base claim, but were indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant believes that the base claims for claims 4, 11, 13 and 18 are patentable for at least the reasons provided above, and thus claims 4, 11, 13 and 18 are in condition for allowance.

Claims 20-26 are allowed.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney ((612) 373-6960) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 24 day of September, 2003.

Candis B. Buending

Name

Signature